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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/533,966

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Ville Kettunen

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EXAMINER

SNYDER, ZACHARY J

ART UNIT

PAPER NUMBER

2889

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DELIVERY MODE

09/15/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,966	Applicant(s) KETTUNEN ET AL.	
	Examiner Zachary Snyder	Art Unit 2889	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 1-19 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/5/2005, 6/29/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of claims 20-27 in the reply filed on 9/1/2009 is acknowledged.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 20-22 and 24-27 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 1,966,059 to Chiera.

In regard to claim 20, Chiera discloses in figure 5 an optical element comprising at least one of diffractive type or refractive type micro-optical structures on at least one of its surfaces (peaks and valleys created by reference numerals 8 and 9), wherein

said surface comprises a plurality of independent sections wherein at least two of said sections have micro-optical structures that are different from one another (valleys that are numeral 8 are one section, peaks that are numeral 9 are another section, and they are different from one another, figure 5).

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In regard to claim 21, Chiera discloses the limitations of claim 20 and that the micro-optical structures of the micro-optical element are designed according to the position, size and shape of the one or more electroluminescent elements, and output light distribution of the one or more electroluminescent elements to be used in conjunction with the optical element (the micro-optical structure are designed in to cover the electroluminescent element so it must take into account the position, size, and shape of the electroluminescent element and has an effect on the output light distribution so this as well is taken into consideration).

In regard to claim 22, Jaskie discloses the limitations of claim 20 and that the different sections comprise different micro-optical structures present in a single at least partially transparent layer (shown in figure 5 that the screen comprises different micro-optical structures 8 and 9 which form a single layer that is at least partially transparent (translucent screen, COL. 1, LINES 48-50)).

In regard to claim 24, Chiera discloses the limitations of claim 20 and that independent section each have an individual optical function (shown in figure 5 that the sections have different heights and will therefore each will have a different effect on incident light).

In regard to claim 25, Chiera discloses in figure 5 a method for manufacturing an optical element comprising the steps of:

providing an at least partially transparent material with a surface (shown in figure 5, translucent screen, COL. 1, LINES 48-50), and

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adding to said surface a structure serving as micro-optical element for shaping and/or collimating light (rays will mix and form white light at a distance of about 5 inches from the screen, COL. 2, LINES 60-63), wherein said structure is shaped such that said micro-optical element comprises a plurality of independent sections wherein at least two of said sections have micro-optical structures that are different from one another (valleys that are numeral 8 are one section, peaks that are numeral 9 are another section, and they are different from one another, figure 5).

In regard to claim 26, Chiera discloses the limitations of claim 25 and that the method further comprises the step of embossing in said surface a micro-structure serving as said micro-optical element (method of forming the adjacent portions on the translucent medium may be embossing, COL. 2, LINES 106-110)

In regard to claim 27, Chiera discloses the limitations of claim 25 and that the method further comprises manufacturing the different sections by manufacturing different micro-optical structures in a single at least partially transparent layer (shown in figure 5 that the screen comprises different micro-optical structures 8 and 9 which form a single layer that is at least partially transparent (translucent screen, COL. 1, LINES 48-50)).

Claims 20-27 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,698,941 to Jaskie et al.

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In regard to claim 20, Jaskie discloses in figure 19 an optical element comprising at least one of diffractive type or refractive type micro-optical structures on at least one of its surfaces (light refracting groove 920, COL. 9, LINE 19), wherein

said surface comprises a plurality of independent sections wherein at least two of said sections have micro-optical structures that are different from one another (region 904 and region 902, one containing grooves 920 and one not, figure 19).

In regard to claim 21, Jaskie discloses the limitations of claim 20 and that the micro-optical structures of the micro-optical element are designed according to the position, size and shape of the one or more electroluminescent elements, and output light distribution of the one or more electroluminescent elements to be used in conjunction with the optical element (shown in figure 19 that light emitting elements 810, 808, and 814 are all taken into consideration regarding the placement of grooves 920, the light distribution of light 818 is adjusted by the micro-optical elements).

In regard to claim 22, Jaskie discloses the limitations of claim 20 and that the different sections comprise different micro-optical structures present in a single at least partially transparent layer (shown in figure 19 that the different micro-optical structures in sections 902 and 904 are all provided in layer 900).

In regard to claim 23, Jaskie discloses the limitations of claim 20 and that the micro-optical structure comprises features having a characteristic profile dimensions of between 0.5

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micrometers and 200 micrometers (the width of the light emitting regions is on the order of 150 micrometers, COL. 5, LINES 12-13, Grooves 920 are formed so that they overlap light-emitting regions 814, COL. 10, LINES 10-15).

In regard to claim 24, Jaskie discloses the limitations of claim 20 and that independent section each have an individual optical function (shown in figure 19 that light 818 is affected in different ways in sections 902 and 904).

In regard to claim 25, Jaskie discloses in figure 5 a method for manufacturing an optical element comprising the steps of:

providing an at least partially transparent material with a surface (figure 19, layer 900),
and

adding to said surface a structure serving as micro-optical element for shaping and/or collimating light (grooves 920, shown in figure 19 to be shaping light 818), wherein said structure is shaped such that said micro-optical element comprises a plurality of independent sections wherein at least two of said sections have micro-optical structures that are different from one another (sections 902 and 904, shown figure 19, have different affects on light 818).

In regard to claim 26, Jaskie discloses the limitations of claim 25 and that the method further comprises the step of embossing in said surface a micro-structure serving as said micro-optical element (grooves 920 are formed by embossing, COL. 10, LINE 1)

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In regard to claim 27, Jaskie discloses the limitations of claim 25 and that the method further comprises manufacturing the different sections by manufacturing different micro-optical structures in a single at least partially transparent layer (shown in figure 19 that the different micro-optical structures in sections 902 and 904 are all provided in layer 900).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary Snyder whose telephone number is (571)270-5291. The examiner can normally be reached on Monday through Friday, 9:30AM to 6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Toan Ton can be reached on (571)272-2303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Toan Ton/
Supervisory Patent Examiner, Art Unit 2889

/Zachary Snyder/
Examiner, Art Unit 2889